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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/564,230  
Filing Date: January 10, 2006  
Appellant(s): JERG ET AL.

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Andre Pallapies  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 15 January 2010 appealing from the Office action mailed 19 August 2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:  
Claims 10 and 13-23 are being appealed.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

European Patent Application No. 358279 A1      Fried et al.      03-1990

U.S. Patent No. 5,343,632      Dinh      09-1994

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claims 10 and 13-23 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application Publication No. 358279 A1 to Fried et al.**

Regarding claim 10, Fried et al. discloses a dishwasher with a rinsing container (Fig 1, part 1); a spraying system using rinsing water (not shown in the Figures; machine translation, page 2, ll. 5-6, "A rinsing container..."); and a double walled drying container connected outside of the rinsing container, the container filled with a desiccant that is reversibly dehydratable (machine translation, page 2, ll. 6-8, "Around the instantaneous..."; machine translation, page 1, ll. 5, "regeneratable by heating..."), air is circulated through the dishwasher wherein the dry air takes up moisture and is dried again by the drying container (machine translation, page 2, ll. 15-18, "In the drying container...") which the drying step is indicated to occur after some rinsing step (machine translation, page 1, ll. 8-9, "Afterwards the hot rinsing..."), and the heating element which dries the desiccant is also used to heat the rinsing water (machine translation, page 2, ll. 6-8, "Around the instantaneous..."; machine translation, page 2, ll. 21-23, "With the next start-up..."); see also Fig. 2, parts 7 and 3, drying container and instantaneous water heater respectively).

Regarding claim 13, Fried et al. teaches a double walled drying container filled with desiccant (machine translation, page 2, ll. 6-8, "Around the instantaneous...") that is capable of being renewed by the heater thereby giving up moisture for the next rinsing cycle (machine translation, page 2, ll. 21-23, "With the next start-up...; machine translation, page 1, ll. 5, "regeneratable by heating...").

Regarding claims 14-15, Fried et al. teaches that the electric heater is preferably an electric instantaneous water heater (machine translation, page 1, ll. 3) and that the heater is located in the pipe which goes to the drying container, more so Fried et al.

teaches that the electric heater is surrounded by the drying container with desiccant (see Fig. 2, parts 3 and 7; machine translation, page 2, ll. 6-7, "Around the instantaneous..."). These claims are treated as though they depend from claim 12.

Regarding claim 16, Fried et al. may not teach that the air that exits the inlet pipe (blow-out port, Fig. 1, part 9) is cooled. However, basic thermodynamics teaches that as an adiabatic gas expands, it cools. When the air exits the pipe, it will naturally cool.

Regarding claim 17, Fried et al. teaches that the inlet pipe (blow-out port, Fig. 1, part 9) extends up into the rinsing container and has a cap-like cover (Fig. 1, part 10) to keep out water (see Fig 1, part 9 and 10; machine translation, page 1, ll. 48-52, "Since the air circulations..."). This claim is treated as though it depends from claim 12.

Regarding claim 18, Fried et al. teaches that the mechanism for heating is that of a latent heat storage (machine translation, page 1, ll. 20-21, "To the avoidance...") wherein the water desorbed from the desiccant is heated and reused as rinsing water (machine translation, page 2, ll. 21-23, "With the next start-up..."). This claim is treated as though it depends from claim 12.

Regarding claim 19, the claim language concerning "during a partial program step using rinsing liquid to be heated, air from the washing container and/or from the ambient air is passed through the sorption column and into the washing container" is considered as intended use, does not provide further structural limitations to the claim language, and will not be given patentable weight. Furthermore, it is noted that the apparatus of Fried et al. is capable of performing said intended use.

Regarding claim 20, the claim language concerning "during a partial program step 'drying; air from the washing container and/or from the ambient air is passed through the sorption column and into the washing container" is considered as intended use, does not provide further structural limitations to the claim language, and will not be given patentable weight. Furthermore, it is noted that the apparatus of Fried et al. is capable of performing said intended use.

Regarding claim 21, Fried et al. teaches the steps of washing the dishes with detergent, rinsing with water, and then drying the dishes (machine translation, page 1, ll. 7-9, "After conclusion of this.."). Furthermore, Fried et al. teaches that during the drying step air is circulated from the dishwasher to the drying container, through the desiccant which is reversibly dehydratable, and back to the dishwasher (machine translation, page 2, ll. 15-18, "In the drying container..."; machine translation, page 1, ll. 5, "regeneratable by heating..."). Fried et al. further teaches that the drying container and desiccant are subjected to a heating step wherein desorption occurs and the heated water recovered is used as rinsing water (machine translation, page 2, ll. 21-23, "With the next start-up...; machine translation, page 1, ll. 5, "regeneratable by heating..."). Fried et al. further teaches that the rinsing container has an outlet pipe to the drying container (see Fig. 1, the pipe not labeled running between parts 14 and 13). Fried et al. also teaches that the rinsing container has an inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container..."). Fried et al. also teaches that the outlet pipe has a fan to suck

in air from the rinsing container located just before the drying container and desiccant (see Fig. 1, part 13; machine translation, page 2, ll. 9-10, "Over the terminal..."; machine translation, page 2, ll. 14-15, "Now if the fan 13...").

Regarding claim 22, Fried et al. also teaches that the rinsing container has a inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container...") comprising a pipe (Fig. 1, part 9) that has an outlet (inherent, see Fig. 1, part 9) with a one way valve (cap-like closure, Fig. 1, part 10, see machine translation, claims 11 and 12).

Regarding claim 23, Fried et al. also teaches that the rinsing container has a inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container...") comprising an inlet valve (Fig. 1, part 14, machine translation, claim 10).

**Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application Publication No. 358279 A1 to Fried et al. in view of U.S. Patent No. 5,343,632 to Dinh.**

Regarding claim 16, Fried et al. is relied upon as above in claim 10. Fried et al. may not teach that the air introduced into the washing container via the inlet is cooled.



Dinh teaches a closed-loop drying system (col. 3, ll. 13-15) which may be used in a dishwasher (col. 8, ll. 8-10) wherein a cooler/condenser (col. 7, ll. 32-36) is used to cool the humid air in order to further remove moisture from the air before the air is recirculated (col. 7, ll. 58-66).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dishwasher drying system of Fried et al. with the cooler/condenser of Dinh in order to cool the air so that even more moisture may be removed from the air before it is recirculated.

#### **(10) Response to Argument**

##### **(A) Claims 10 and 13-21 are Anticipated under 35 U.S.C. 102(b) by European Patent Application No. 358279 A1 to Fried et al.**

Appellant's first argument, with regards to claim 10, is that European Patent Application No. 358279 A1 to Fried et al. does not teach that the thermal energy used to effect desorption of the sorption column is also used to heat one of the rinsing solution in the washing container and to heat the crockery.

Appellant's exact claim language for the use of the thermal energy as in claim 10, ll. 12-13, is "....the thermal energy being at least partly used for at least one of heating the rinsing solution in the washing container and heating the crockery." Appellant by claiming "at least one" implies an and/or type language wherein Examiner need only teach from the prior art a heating of the rinsing solution or a heating of the

crockery. Fried et al. teaches that at the next startup of the dishwasher the desiccant in the drying container becomes again heated and the moisture recovered from circulating the air is returned to the rinsing process (machine translation, page 2, ll. 21-23). Therefore the desiccant is heated to remove moisture therefrom, wherein one of ordinary skill realizes that as the desiccant is heated the moisture held by the desiccant will also be heated. As Fried et al. teaches, when the desiccant is heated the moisture is released and returned back to the rinsing process. Therefore one of ordinary skill realizes that since the desiccant is heated, the moisture therein is heated, said heated moisture releases from the desiccant, said heated moisture is returned to the rinsing process, and wherein one of ordinary skill realizes that Fried teaches the claim limitation of the thermal energy being used to heat the rinsing solution. Furthermore one of ordinary skill realizes that the thermal energy is going to escape from the desiccant and the heat associated therewith will go from an area of higher temperature to an area of lower temperature, which includes the washing container, and any crockery within will also be heated by said thermal energy even if to the slightest of degree as the desiccant does not comprise an adiabatic system.

It should be noted, though, that Examiner has considered the above quoted claim language to be an intended use and Appellant has not claimed a structural difference to delineate their invention from that of Fried et al. and Fried et al. teaches the capability of performing said intended use. Furthermore, it should be noted that Appellant has erroneously claimed that the above cited passage of Fried et al. teaches the exact opposite of the referenced claim language. Appellant fails to realize that the moisture

removed from the desiccant is heated and said heated moisture is returned to the rinsing process thereby becoming "rinsing solution".

Next after being put on notice that the cited claim language of claim 10 would be considered intended use, Appellant now argue that structure is claimed in the claim language "...a sorption column communicated with the washing container for the passage of air between the sorption column and the washing container..." (Claim 10, ll. 4-5). However, once again Appellant has not delineated there structure from that of Fried et al. wherein Fried et al. teaches a container filled with a desiccant that is reversibly dehydratable (machine translation, page 2, ll. 6-8, "Around the instantaneous..."; machine translation, page 1, ll. 5, "regeneratable by heating...") wherein air is circulated through the dishwasher and the dry air takes up moisture and is dried again by the drying container (machine translation, page 2, ll. 15-18, "In the drying container...") whereby one of ordinary skill realizes that the drying container is in communication with the rinsing container of the dishwasher (see also Fig. 1, parts 1, 3, 9-10, 12-14 and Fig. 2, part 7).

Appellant then argue that claims 13-21 are not anticipated from the same reasons as claim 10 and because said claims recite additional subject matter. By proxy, Appellant is arguing that claims 13-21 stand or fall with the same argument as in claim 10. Since, Examiner has clearly presented the argument as to why the cited claim language in claim 10 concerning the thermal energy is an intended use and taught by the prior art—specifically Fried et al.—Examiner finds that claims 13-21 should also stand rejected.

**(B) Claims 10 and 13-21 are Anticipated under 35 U.S.C. 102(b) by European Patent Application No. 358279 A1 to Fried et al.**

Regarding claim 22, Appellant argues that Examiner has misinterpreted the claim language and that Fried et al. does not teach the corresponding claimed structure.

Appellant fails to realize that their broad claim language may be interpreted in one of two ways. Appellant claims in claim 22, "...a washing container having an outlet with a pipe and the pipe includes a check valve..." The claim language may be interpreted to mean 1) a washing container having an outlet wherein said outlet has a pipe and the pipe includes a check valve or 2) a washing container having an outlet, said washing container including a pipe and the pipe includes a check valve. Examiner has interpreted this claim to be read upon Fried et al. in light of the former interpretation rather than the latter interpretation. Examiner should point out that the pipe (Fig. 1, part 9) has been labeled as an inlet pipe as it opens in to the dishwasher, however, this same pipe may be considered an outlet pipe for the drying container (Fig. 2, part 7). However, this does not change the structural rejection of claim 22 in light of Fried et al.

Appellant's claim language has been interpreted to mean a washing container having an outlet wherein said outlet has a pipe and the pipe includes a check valve. Fried et al. teaches a pipe (Fig. 1, part 9) wherein said pipe has an outlet (See Fig. 1 at the end of part 9) and a one way valve (check valve, Fig. 1, part 10, see machine translation claims 11 and 12) wherein one of ordinary skill realizes that air is circulated through parts 14, 12, 3, 9 and 10 of Fig. 1 and part 7 of Fig. 2 using the fan (part 13)

and that the cap acts as a one way valve opening with the air pressure from the fan but closing when said fan is not in use to prevent moisture from entering the pipe (Fig. 1, part 9). Furthermore Appellant has never specifically claimed that the outlet had to be to the area remote from the dishwasher, rather Examiner has interpreted said outlet to be outside of the washing container, wherein said area includes the pipes that lead to the desiccant. Specifically Appellant claims "...wherein the drying step including passing air from the washing container through the sorption column includes passing air from a washing container having an outlet with a pipe and the pipe includes a check valve." Examiner finds Appellant's claim language to be wrought with breadth and because of such broad claim language Fried et al. reads upon Appellant's invention.

Regarding claim 23, Appellant argues that apparatus of Fried et al. does not disclose the use of ambient air and that the pipe (Fig. 1, part 9) is not a pipe along which air is passed from the washing container but is instead, a pipe along which air is passed into the washing container.

With regards to the second and more minor issue, Examiner has already stated that the pipe (Fig. 1, part 9) has been labeled as an inlet pipe as it opens in to the dishwasher, however, this same pipe may be considered an outlet pipe for the drying container (Fig. 2, part 7).

Appellant claims in claim 23, "wherein the drying step including passing air from the washing container through the sorption column includes passing air from a washing container having, in the direction of flow, an inlet valve to the ambient air." Once again Appellant has used immensely broad language. Fried et al. clearly teaches that the

rinsing container has a inlet pipe (blow-out port, Fig. 1, part 9) which reintroduces air from the rinsing container that has passed through the drying container and desiccant back into the rinsing container (machine translation, page 2, ll. 15-18, "In the drying container...") comprising an inlet valve (Fig. 1, part 14, machine translation, claim 10).

Examiner has interpreted Appellant's claim language to mean that air is passed/circulated from the washing container to the sorption column through an inlet valve back to the ambient air of the washing container. Appellant never specifically claims that the ambient air is outside of the dishwasher, rather Examiner has interpreted ambient air to include air surrounding the inlet valve within the washing container. Furthermore, as pointed out above, Fried et al. clearly teaches all of the claim limitations of claim 23.

**(C) Claims 16 is Unpatentable under 35 U.S.C. 103(a) over European Patent Application No. 358279 A1 to Fried et al. in view of U.S. Patent No. 5,343,632 to Dinh.**

Regarding claim 16, Appellant does not argue the obviousness analysis of European Patent Application No. 358279 A1 to Fried et al. in view of U.S. Patent No. 5,343,632 to Dinh, but rather argue that Dinh does not cure the deficiencies of Fried et al. as with respect to the independent claim 10 from which claim 16 depends on. By proxy, Appellant has argued that claim 16 stands or falls with claim 10. Since, Examiner has clearly presented the argument as to why claim 10 is taught by the prior art—specifically Fried et al.—Examiner finds that claim 16 should also stand rejected.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/BLO/  
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